

ABSTRACT

The object of the present invention is to provide methods for identifying factors involved in inducing the differentiation
5 of pluripotent cells, and methods for using those factors.

Using cDNA microarray technology, variations in gene expression between placebo-treated and CCl₄-treated mice livers were analyzed 24 hours after treatment, and several growth factors were selected. The effects of matrix and growth factors
10 on hepatocyte differentiation rates of ES cells were investigated. As a result, the present inventors succeeded in differentiating hepatocytes from ES cells without EB formation, using simple adherent monoculturing in media comprising several growth factors in culture dishes with two different matrices.